

dently become established there many years ago, while young trees were springing up from seed produced by the older trees.

### HAMELIA PATENS Jacq.

The HAMELIA grows in hammocks in the southern two thirds of peninsular Florida and in the hammocks of the Florida Keys, but it seems never to have been observed except as a shrub. However, the writer has found specimens on the Everglade Keys growing in the dense hammocks between Cocoanut Grove and Cutler, reaching a height of 20 feet and with a trunk diameter of fully 6 inches.

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### TRAGOPOGON PRATENSIS × PORRIFOLIUS

BY EARL E. SHERFF

So far as the writer can find, the presence in the United States of hybrids between our two well-known species of salsify, *Tragopogon pratensis* L. and *T. porrifolius* L., has not heretofore been observed with certainty. Britton and Brown\* state that "an apparent hybrid between . . . [these two species] . . . has been noticed at New Brunswick, N. J." But more recently, Britton† omits mention of this "apparent" hybrid and, similarly, Gray's New Manual‡ fails to record it.

That there exists, however, within the two species in question a potentiality for hybridization, was demonstrated by Linnaeus§ as early as 1759. By removing the pollen of *T. pratensis* and placing upon the stigmas some pollen from *T. porrifolius* he secured hybrids with an intermediate color scheme in the flowers. Instead of the yellow peculiar to *T. pratensis* or the purple peculiar to *T. porrifolius*, the heads of the hybrid exhibited both red and yellow. These colors were somewhat approximated later in spontaneous hybrids observed by J. Lange|| in the Danish

\*Illustrated Flora, p. 269. 1893. New York.

†Man. of Flora of Northeastern States and Canada. 1905. New York.

‡Gray's New Manual. 1908. New York.

§Amoenitates academicae, X., p. 126. 1790. Erlangen.

||See Focke, Pflanzen Mischlinge, p. 222. 1881. Berlin.

islands of Fünen and Laaland. The outer flowers were "brown-violet, the inner yellow."

During the month of June, 1910, it was the writer's privilege to make frequent observations upon both *T. porrifolius* and *T. pratensis* along the right-of-way of the C. M. & St. P. R. R. at Elgin, Ill. For a distance of several hundred feet the two species were abundant, the former occurring in the northern half of the tract and the latter in the southern half. Where the two kinds met, there were found not only plants of each species but also some thirty or more plants quite distinct. In size, the last plants more nearly resembled *T. porrifolius*, which in that vicinity was considerably the more robust plant. The flowers possessed, to a remarkable extent, the color pattern observed by Lange in the hybrids of Fünen and Laaland; the outer flowers of each head being a reddish "brown-violet" and the inner a yellow color. The involucrel bracts were mostly equal in length to the ray flowers. A remarkable uniformity prevailed in the flower-colorations, size of the mature plants, and proportionate length of the bracts. Individual plants were examined from time to time and in no case were they found to bear pure yellow or pure purple heads. However ramose the plant, its several branches produced heads with uniformly the outer flowers reddish brown-violet and the inner flowers yellow.

It thus becomes obvious that these plants were nothing more or less than hybrids between the two species that abounded in either direction. It is the more obvious because they were found growing only in a small restricted area of about three square rods where the two pure stocks met.

EVANSTON, ILLINOIS.

### SHORTER NOTES

A NEW GERARDIA FROM NEW JERSEY.—*Gerardia racemulosa*.—Stem slender, 3-6 dm. tall, striate-angled, smooth, branched. Branches slender, elongated, ascending. Leaves narrowly linear to filiform, sparingly scabrous above, those of the stem 1.5-2.5 cm. long, 0.5-1.5 mm. broad, usually curling on drying, with conspicuous clusters in the axils. Inflorescences strongly racemose.